

Math 91 Refresher Course Content

11. Graphs of Equations, Functions, and Inequalities in Two Variables (partially included)

[Section 11.1: Reading Graphs: Linear Equations in Two Variables](#)

[Section 11.2: Graphing Linear Equations in Two Variables](#)

[Section 11.3: Slope of a Line](#)

[Section 11.4: Equations of Lines](#)

[Section 11.5: Graphing Linear Inequalities in Two Variables](#)

[Section 11.6: Introduction to Functions](#)

[Section 11.7: Graphing Linear Functions](#) (partially included)

[Section 11.8: Piecewise-Defined Functions; Shifting & Reflecting Graphs](#) (partially included)

[Section 11.9: Distance and Midpoint Formulas; Circles](#)

[Section 11.10: More on Functions and Their Graphs](#)

15. Systems of Linear Equations and Inequalities (partially included)

[Section 15.1: Solving Systems of Linear Equations by Graphing](#)

[Section 15.2: Solving Systems of Linear Equations by Substitution](#)

[Section 15.3: Solving Systems of Linear Equations by Elimination](#)

[Section 15.4: Applications of Linear Systems](#)

[Section 15.5: Solving Systems of Linear Inequalities](#)

[Section 15.6: Solving Systems of Linear Equations in Three Variables](#)

[Section 15.7: Solving Systems of Equations by Matrices](#)

[Section 15.8: Solving Systems of Equations Using Determinants](#)

16. Roots, Radicals, and Complex Numbers

[Section 16.1: Evaluating Roots](#)

[Section 16.2: Multiplying, Dividing, and Simplifying Radicals](#)

[Section 16.3: Adding and Subtracting Radicals](#)

[Section 16.4: Rationalizing the Denominator](#)

[Section 16.5: More Simplifying and Operations with Radicals](#)

[Section 16.6: Solving Equations with Radicals](#)

[Section 16.7: Rational Exponents](#)

[Section 16.8: Rationalizing Denominators and Numerators of Radical Expressions](#)

[Section 16.9: Radical Equations and Problem Solving](#)

[Section 16.10: Complex Numbers](#)

17. Quadratic Equations and Functions (partially included)

[Section 17.1: Solving Equations by the Square Root Property](#)

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- [+ Section 17.2: Solving Quadratic Equations by Completing the Square](#)
 - [+ Section 17.3: Solving Quadratic Equations by the Quadratic Formula](#)
 - [+ Section 17.4: Graphing Quadratic Equations and Inequalities](#)
 - [+ Section 17.5: Introduction to Functions](#)
 - [+ Section 17.6: Solving Equations by Using Quadratic Methods](#)
 - [+ Section 17.7: Nonlinear Inequalities in One Variable](#)
 - [+ Section 17.8: Quadratic Functions and Their Graphs](#)
 - [+ Section 17.9: Further Graphing of Quadratic Functions](#)
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[- 18. Exponential and Logarithmic Functions](#)

- [+ Section 18.1: The Algebra of Functions; Composite Functions](#)
 - [+ Section 18.2: Inverse Functions](#)
 - [+ Section 18.3: Exponential Functions](#)
 - [+ Section 18.4: Logarithmic Functions](#)
 - [+ Section 18.5: Properties of Logarithms](#)
 - [+ Section 18.6: Common Logarithms, Natural Logarithms, and Change of Base](#)
 - [+ Section 18.7: Exponential and Logarithmic Equations and Applications](#)
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[- 19. Conic Sections](#)

- [+ Section 19.1: The Parabola and the Circle](#)
 - [+ Section 19.2: The Ellipse and the Hyperbola](#)
 - [+ Section 19.3: Solving Nonlinear Systems of Equations](#)
 - [+ Section 19.4: Nonlinear Inequalities and Systems of Inequalities](#)
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[- 20. Sequences, Series, and the Binomial Theorem; Probability \(partially included\)](#)

- [+ Section 20.1: Sequences](#)
- [+ Section 20.2: Arithmetic and Geometric Sequences](#)
- [+ Section 20.3: Series](#)
- [+ Section 20.4: Partial Sums of Arithmetic and Geometric Sequences](#)
- [+ Section 20.5: The Binomial Theorem](#)
- [+ Section 20.6: Mathematical Induction](#)
- [+ Section 20.7: Counting Principles, Permutations, and Combinations](#)
- [+ Section 20.8: Probability](#)